

REMARKS

Initially, the allowance of claims 24-31 is gratefully acknowledged. The claim rejections are addressed below.

The § 102 and 103 Rejections

Claims 1-23 and 32-41 presently stand rejected as allegedly anticipated by and/or obvious over U.S. Patent No. 5,635,696 (Dabrowski), by itself or in various combinations with three other cited patents. More specifically, claims 1-5, 8, 9, 12-17, 19 and 20 presently stand rejected under 102(b) as allegedly anticipated by Dabrowski '696. Claims 6-7, 18, 32-33, and 35-40 presently stand rejected under 103(a) as allegedly unpatentable over Dabrowski '696 in view of U.S. Patent No. 5,919,091 (Bell, et al.). Claims 10, 11, 21 and 22 presently stand rejected under 103(a) as allegedly unpatentable over Dabrowski '696 in view of U.S. Patent No. 6,577,733 (Charrin). Claim 23 presently stands rejected under 103(a) as allegedly unpatentable over Dabrowski '696 in view of U.S. Patent No. 5,450,938 (Rademacher). Claim 34 presently stands rejected under 103(a) as allegedly unpatentable over Dabrowski '696 in view of Bell '091 and Rademacher '938. Claim 41 presently stands rejected under 103(a) as allegedly unpatentable over Dabrowski '696 in view of Bell '091 and Charrin '733. These rejections are respectfully traversed.

Claims 1, 2, 13, 14, 32, 33, and 36 have been amended to clarify the subject matter being claimed. Claim 2 has been rewritten in independent form, with some

additional changes as detailed below. Claim 8 has been canceled, and its subject matter incorporated into claim 1. In the remarks below, first the Charrin '733 reference will be addressed. Independent claims 1, 2, 13, and 32 will be addressed next, followed last by the dependent claims.

The instant application names the same inventor and assignee as Charrin '733, which has been cited as prior art against the instant application. However, it is respectfully submitted that Charrin '733 does not qualify as prior art. The instant application was filed on July 10, 2001, long before the Charrin '733 patent issued in June 2003. The Charrin '733 patent therefore does not qualify as 102(b) prior art.¹ Sections 102(a), 102(e), and 102(g) all refer to activities by "others" or "another," but in this case Mr. Charrin is the same inventor of the '733 patent and the instant application.² Thus, it is respectfully submitted that Charrin '733 does not qualify as prior art, and should not be considered. Accordingly, it is respectfully requested that the rejections of claims 10-11, 21-22, and 41 be withdrawn, as those rejections all rely on Charrin '733.

Turning to the independent claims, claim 1 is directed to a combined bill acceptor and data unit reader, and, as amended, includes a "bill acceptor," a "host interface," and a "a data unit reader electronically interposed between said bill acceptor and said host interface, said data unit reader passing through cash

¹ Although a counterpart PCT application published in June 2001, that publication likewise would not qualify as 102(b) prior art since it did not publish more than a year before the filing date of the instant application.

² Other counterpart foreign applications have also been filed, but none resulted in a patent or inventor's certificate prior to July 10, 2001 (the filing date of the instant application), and so 102(d) is likewise believed to be inapplicable here.

transaction data from said bill acceptor to said host interface according to a bill validator protocol when currency is accepted by said bill acceptor, and transmitting cashless transaction data to said host interface according to a different protocol when a data unit is read by said data unit reader.” Claim 1 has been amended, among other ways, to clarify that the data unit reader is “electronically interposed” between the bill acceptor and the host interface. By contrast, the magnetic card reader of Dabrowski ‘696 connects in parallel with the bill acceptor to the I/O printed circuit board 56, and is not “**electronically** interposed” between the magnetic card reader and a host interface. See Fig. 1, and col. 4, lines 28-31. It is therefore respectfully submitted that Dabrowski ‘696 fails to disclose or suggest a “data unit reader” (such as a magnetic card reader) that is “electronically interposed” between a bill acceptor and a host interface, as recited in claim 1.

Likewise, neither of the other two cited items – Bell ‘091 or Rademacher ‘938 (with Charrin ‘733 being inapplicable as discussed above) – discloses or suggests these features. In Bell ‘091, for example, the bill acceptor 62 is illustrated in Fig. 6 as connected directly to a machine CPU 56. There is no indication of a data unit reader “electrically interposed” between a bill acceptor and a host interface. In Rademacher ‘938, the card vend controller 28 mimics the vending machine coin changer, and sends “the same signals that would be sent from the coin and currency acceptor” to the vending machine. See col. 3, lines 25-31. Rademacher ‘938 fails to disclose or suggest, among other things, a data unit reader which “pass[es] through cash transaction data from said bill acceptor to said host interface according to a bill validator protocol when currency is accepted by said bill

acceptor," but "transmit[s] cashless transaction data to said host interface **according to a different protocol** when a data unit is read by said data unit reader." It is therefore respectfully submitted that claim 1 should be allowable over the cited items, whether they are considered alone or in combination.

Claim 2 has been rewritten as an independent claim. It includes the general subject matter of original claim 1, with the clarification that the data unit reader is "electronically" interposed between the bill acceptor and host interface, and further recites that the data unit reader comprises "a relay across which electrical signals are transmitted," and "passes through cash transaction data from said bill acceptor to said host interface when said relay is in a first position, and prevents cash transaction data from passing through from said bill acceptor to said host interface when said relay is in a second position." While the Office Action cites the currency gate 100 of Dabrowski '696 as allegedly corresponding to the claimed "relay," claim 2 has been further amended to clarify that the relay is one "across which electrical signals are transmitted," unlike the physical "gate" of Dabrowski '696. Moreover, it is further submitted that the currency gate 100 of Dabrowski '696 does not "pass[] through cash transaction **data**" from a bill acceptor, but physically allows or disallows actual currency to be inserted into a bill acceptor. Neither Bell '091 nor Rademacher '938 discloses or suggests these features either, and it is therefore respectfully submitted that claim 2 should be allowable over the cited items.

Claim 13 is directed to a "multi-mode card reader," and includes a "card reader interface," a "bill acceptor interface," and "a card reader controller connected to said card reader interface and electronically interposed between said bill acceptor

interface and a host interface, said card reader controller allowing transfer of cash transaction data from said bill acceptor interface to said host interface when said cash transaction data is received from said bill acceptor interface and said card reader controller is in a first mode, and allowing transfer of cashless transaction data from said card reader interface to said host interface when said cashless transaction data is received from said card reader interface and said card reader controller is in a second mode.” Claim 13 has been further amended to clarify that the card reader controller “blocks cashless transaction data from said card reader interface when in said first mode.”

It is respectfully submitted that, in contrast to the above subject matter, Dabrowski '696 fails to disclose or suggest a card reader controller “electronically interposed between” a bill acceptor interface and a host interface, for reasons similar to those explained for claim 1. Bell '091 likewise fails to disclose or suggest this feature, for reasons similar to those explained for claim 1.

The last cited item, Rademacher '938, fails to disclose or suggest, among other things, a “multi-mode” card reader controller that allows transfer of “cash transaction data from said bill acceptor interface to said host interface when said cash transaction data is received from said bill acceptor interface and said card reader controller is in a first mode,” and transfer of “cashless transaction data from said card reader interface to said host interface when said cashless transaction data is received from said card reader interface and said card reader controller is in a second mode,” wherein the card reader controller “blocks cashless transaction data

from said card reader interface when in said first mode." It is therefore respectfully submitted that claim 13 should be allowable over the various cited items.

Claim 32 is directed to a "combined bill acceptor and smart card reader," and includes, as amended, a "bill acceptor," a "host interface," and a "smart card reader electronically interposed between said bill acceptor and said host interface, said smart card reader passing through cash transaction data from said bill acceptor to a host device microprocessor via said host interface when currency is accepted by said bill acceptor and said smart card reader is in a cash mode, and transmitting cashless transaction data to said host device microprocessor via said host interface according to a cashless protocol when a smart card is read by said smart card reader and said smart card reader is in a cashless mode."

It is respectfully submitted that, in contrast to the above subject matter, Dabrowski '696 fails to disclose or suggest a smart card reader controller "electronically interposed between" a bill acceptor and a host interface, for reasons similar to those explained for claim 1. Bell '091 likewise fails to disclose or suggest this feature, for reasons similar to those explained for claim 1.

With respect to Rademacher '938, that patent fails to disclose or suggest, among other things, a "smart card reader," much less a smart card reader which "pass[es] through cash transaction data from said bill acceptor to a host device microprocessor via said host interface when currency is accepted by said bill acceptor and said smart card reader is in a cash mode," and "transmit[s] cashless transaction data to said host device microprocessor via said host interface according to a cashless protocol when a smart card is read by said smart card

reader and said smart card reader is in a cashless mode." In contrast, Rademacher '938 mimics coin/currency acceptor signals, and does not transmit "cashless transaction data" according to a "cashless protocol" when a smart card is read, as recited in claim 32. Nor does the device of Rademacher '938 pass through or transmit data to a "host device microprocessor," but instead it interacts with a vending machine using a limited set of relatively simplistic coin/currency acceptor signals. It is therefore respectfully submitted that the subject matter of claim 32 is neither taught nor suggested by any of the cited items, and that claim 32 should be allowable thereover.

Claims 3-12, 14-23, and 33-41 all depend from claims 1, 2, 13, or 32, respectively, and therefore should be allowable for at least the same reasons as the underlying independent claims. Moreover, the dependent claims include additional novel and patentable features over the cited items.

For example, claim 3 depends from claim 2, and recites that the "host interface comprises a protocol translator, said protocol translator converting cash transaction data from a bill validator protocol to a protocol used by a host device connected to said host interface." Although the Office Action cites to Dabrowski '696 for this alleged subject matter, the Office Action is vague about where in Dabrowski '696 it is to be found. It is nonetheless respectfully submitted that Dabrowski '696 does not disclose or suggest a "host interface" which comprises a "protocol translator" which converts cash transaction data from a bill validator protocol, as recited in claim 3.

Claims 15 and 37 are similar to claim 3, and should be allowable for similar reasons.

Claim 4 depends from claim 1, and recites that the combined bill acceptor and data unit comprises, among other things, a “bill acceptor data interface” and a “microprocessor” for “controlling the transfer of data between said bill acceptor data interface and said host interface.” Claim 5 depends from claim 4, and recites that the bill acceptor data interface and the host interface each comprise “a universal asynchronous receiver/transceiver (UART).” Claim 17 (which depends from claim 13) and claims 38-39 (which depend from claim 32) contain similar recitals. It is respectfully submitted that these advantageous features are nowhere disclosed in Dabrowski ‘696 or the other cited items, particularly in combination with the other novel features of claim 1. For example, Dabrowski ‘696 does not disclose or suggest a microprocessor for controlling the transfer of data “between said bill acceptor interface” and “said host interface,” even though it does describe a CPU which is downstream from an input/output circuit board 56. Moreover, Dabrowski ‘696 does not appear to disclose the claimed UARTs. It is therefore respectfully submitted that claims 4, 17, 38 and 39 should be allowable over the cited items.

Claim 10 recites that the data unit comprises a “secured internal meter,” and claim 11 recites that the secured internal meter “is contained with a security and authentication module (SAM).” As claims 10 and 11 were rejected only a combination involving Charrin ‘733, which is not prior art as explained above, it is respectfully submitted that claims 10 and 11 should be allowable. Claims 21 and

22, which depend from independent claim 13, contain similar recitals, as does claim 41 (which depends from independent claim 32), and should likewise be allowable.

Claim 12 recites that the combined bill acceptor and data unit reader further comprises “a security module interposed between said data unit reader and a host device connected to said host interface, said security module permitting transparent communication between said data unit reader and said host device after completion of an authentication and validation process, and otherwise preventing communication between said data unit reader and said host device.” While the Office Action refers to Dabrowski '696 for this subject matter,

Claim 14 depends from independent claim 13, and recites that the multi-mode card reader further comprises a “relay across which electrical signals are transmitted, wherein said relay passes through cash transaction data from said bill acceptor interface to said host interface when in a first position, and prevents cash transaction data from passing from said bill acceptor interface to said host interface when in a second position.” These recitals are similar to (now independent) claim 2, discussed above, it is respectfully submitted that claim 14 should be allowable for reasons similar to claim 2. Claim 36, which depends from claim 32, contains similar recitals, and should likewise be allowable.

Claim 23 also depends on claim 13 and recites that, “in said second mode, cash transaction data received at said bill acceptor interface is used to credit a card inserted in said card reader interface.” While the Office Action refers to Rademacher '938 in combination with Dabrowski '696 for this subject matter, it is respectfully submitted that one skilled in the art would not be led to combine the

vending machine system of Rademacher '938 with the gaming machine of Dabrowski '696, in part because of the different contexts, and in part because of the serious security concerns with crediting a card in a gaming environment. Moreover, the card vend controller 28 only credits a portion of a vending machine sale back to a card, but it does not use the "cash transaction data received at said bill acceptor interface" directly to credit the card, as in claim 23.

Claim 33 depends from independent claim 32, and recites that the smart card reader "operates in a plurality of modes including a standby mode, said smart card reader switching from said standby mode to said cash mode when receiving cash transaction data from said bill acceptor, and switching from said standby mode to said cashless mode upon insertion of said smart card." While the Office Action refers to Bell '061 in combination with Dabrowski '69 for this subject matter, it is respectfully submitted that the specific claimed three modes are neither disclosed in nor suggested by the cited items.

Claim 34 depends from claim 33 and recites that, "when in said cashless mode, said smart card reader adds credit to said smart card upon receiving cash transaction data from said bill acceptor." These recitals are similar to claim 23, discussed above, and therefore claim 34 should be allowable for similar reasons.

In sum, it is respectfully submitted that claims 1-23 and 32-41 are allowable over the various cited items.

Reservation of Right to Challenge Cited Items

While Applicants have addressed the cited items on the merits, this should not be construed as an admission that some or all of the cited items constitute prior art as against the claimed invention. Applicants reserve the right to antedate any of the cited items pursuant to the appropriate rules, laws, and regulations if deemed necessary to do so.

Likewise, Applicant's election to address the cited items on the merits should not be construed as an admission the items provide an enabling disclosure. Applicants reserve the right to challenge the sufficiency of the cited items at a later point in time, including in any post-issuance proceeding or suit, if appropriate.

New Claims

New claims 42-46 have been added. All of the new claims are dependent upon existing claims.

Claim 42 depends from claim 9, and indirectly from claim 1. It recites that the "cashless transaction data is communicated by said host interface to said electronic gaming machine according to an electronic gaming machine protocol." Examples of such a protocol include SDS or SAS, both of which are well known standard protocols in the gaming industry. It is respectfully submitted that the subject matter of claim 42 is neither disclosed in nor suggested by the cited items, particularly in combination with claim 1's further recital that the data unit reader passes through "cash transaction data from said bill acceptor to said host interface according to a bill validator protocol...," and that claim 42 should hence be allowable.

New claims 43-46 depend from independent claims 1, 13, 24, and 32, respectively. Each of the new claims recites in essence that the reader further comprises "a system interface by which said cashless transaction data may be communicated to a central computer controlling or monitoring a plurality of host devices," or in the case of claim 24 a step analogous to such a feature. It is respectfully submitted that the combinations of each of claims 43-46 with the their respective base claims are not found in nor suggested by the cited items, and that new claims 43-46 should be allowable.

Objection to the Drawings

Item #10 in the Office Action Summary indicates an objection to the Drawings, yet no description of the objection(s) has been provided. The Summary may contain an error in this regard. Clarification is kindly requested.

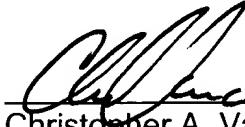
Request for Allowance

The undersigned has made a good faith effort to respond to all of the rejections in the case and to place the claims in condition for immediate allowance. Nevertheless, if any unresolved issue remains, the Examiner is invited to contact the undersigned by telephone to discuss those issues so that the Notice of Allowance can be mailed at the earliest possible date.

It is respectfully submitted that the instant application stands in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

IRELL & MANELLA LLP

By: 
Christopher A. Vanderlaan
Registration No. 37,747

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1800 Avenue of the Stars, Suite 900
Los Angeles, California 90067-4276
(310) 277-1010